

Secondly, the Examiner objects to the previous amendment to the specification (specifically, line 14, page 11 of the applicants' specification). The Examiner objects to such an amendment to the specification as "new matter".

The applicants respectfully request reconsideration of these objections.

With respect to the outstanding drawing objections, the applicants have cancelled claim 1 without prejudice or disclaimer. Thus, the outstanding drawing objections are now moot.

Furthermore, the subject matter in line 14, page 11 of the applicants' specification, which the Examiner had objected to, has been deleted.

In view of the above, the withdrawal of the outstanding objections to the drawings and specification is in order, and is therefore respectfully solicited.

Claims 1 - 8 are objected to under 35 USC §112, first paragraph, for the specific reasons set forth in the second full paragraph on page 3 of the outstanding Action. The applicants respectfully request reconsideration of this objection.

Again, as indicated above, claim 1 has been cancelled without prejudice or disclaimer. As such, the Examiner's outstanding objection of the claims under 35 USC §112, first paragraph, is now moot.

Accordingly, the withdrawal of the outstanding objection under 35 USC §112, first paragraph, is in order, and is therefore respectfully solicited.

As to the Examiner's outstanding objection to claim 2 (for reasons set forth in the fourth full paragraph on page 3 of the outstanding Action, the applicants have cancelled claim 2 without prejudice or disclaimer.

Thus, the Examiner's outstanding objection to claim 2 is now moot; and the withdrawal of such objection to claim 2 is in order, and is respectfully solicited.

As to the merits of this case, the Examiner maintains the rejection of claims 1 - 8 under 35 USC §103 based on the applicants' discussion of the prior art in view of Maeda (U.S. Patent No. 4,880,486), Fujimoto (U.S. Patent No. 5,115,545) and DiStefano (U.S. Patent No. 5,548,091). The applicants respectfully requests reconsideration of this rejection.

In such obviousness rejection, the Examiner is of the opinion that the applicants' discussion of the prior art:

does not appear to explicitly teach as conventional a process comprising the steps of heating the adhesive on the substrate with a half-thermosetting temperature, and performing a first fixing of plural chips with a first pressure.²

However, the Examiner specifically relies on the teachings of Maeda for such a deficiency in the prior art discussions in the applicants' specification.

The Examiner then goes on to acknowledge that the applicants' discussion of the prior art and Maeda do:

not appear to explicitly teach a process wherein a second fixing is simultaneously performed for each of the chips with a second pressure higher than the first pressure.³

Emphasis added. The Examiner, however, again acknowledges that the above-discussed references do:

not explicitly teach a process comprising heating with a half-thermosetting temperature, and **concurrently** aligning the chips, and first fixing the chips.⁴

The Examiner then, however, specifically relies on DiStefano for supplementing the acknowledged deficiencies in the teachings of the applicants' discussions of the prior art, Maeda and Fujimoto.

² See, the sentence bridging pages 4 and 5 of the outstanding Action.

³ See, lines 7 - 9, page 5 of the outstanding Action.

⁴ See, the last full sentence on page 5 of the outstanding Action.

The applicant's claimed semiconductor fabrication method avoids providing a heating mechanism to a mechanism for aligning a semiconductor chip. According to such claimed invention, the alignment head and heating head are not unified, but are separately provided so that a fabrication method for a semiconductor device equipped with a simple and less expensive alignment head can be provided.

In order to separately provide the alignment head and the heating head, the applicants' claimed invention separates the alignment stage and the thermosetting stage from each other. In order to prevent the positions of the semiconductor chips from deviating from the given positions when the substrate on which the semiconductor chips are mounted is moved from the alignment stage to the thermosetting stage, heating means separately provided from the bonding head heats, on the alignment stage, the thermosetting insulating adhesive so that it becomes a half-thermosetting state.

The teachings from the discussion of the prior art, Maeda '486, Fujimoto and DiStefano, singly or in combination, do not suggest, expressed or implied, improvements directed to avoidance of heating means to the bonding head.

In view of the above, the applicants respectfully submit that even if, arguendo, the teachings of the applicants' discussion of the prior art, Maeda, Fujimoto and DiStefano can be combined in the manner suggested by the Examiner, such combined teachings would still fall far short in fully meeting the applicants' claimed invention, as now set forth in each of

independent claims 11 and 15. Thus, a person of ordinary skill in the art would not have found the applicants' claimed invention, as now set forth in each of independent claims 11 and 15, obvious under 35 USC §103 based on the applicants' discussion of the prior art, Maeda, Fujimoto and DiStefano, singly or in combination.

Furthermore, the dependent claims depend on either independent claim 11 or independent claim 15, and further limit the scope of either claim 11 or claim 15. Thus, at least for the reasons set forth above with respect to claims 11 and 15, the claims dependent therefrom should now be similarly allowable.

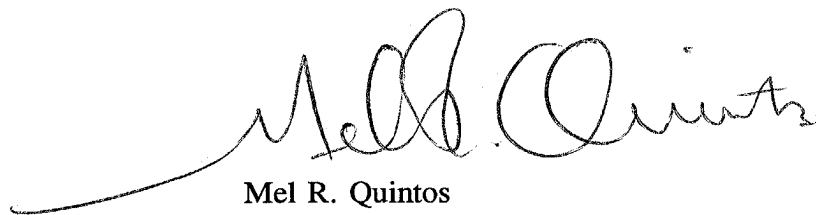
In view of the above, the withdrawal of the outstanding rejection under 35 USC §103 based on the applicants' discussion of the prior art in view of Maeda (U.S. Patent No. 4,880,486), Fujimoto (U.S. Patent No. 5,115,545) and DiStefano (U.S. Patent No. 5,548,091) is in order, and is therefore respectfully solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN, HATTORI,
McLELAND & NAUGHTON

A handwritten signature in cursive script, appearing to read 'Mel R. Quintos', written in dark ink.

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Enclosure: Petition for Extension of Time